

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

APELDYN CORPORATION,)	
)	
Plaintiff,)	
)	
v.)	Civ. No. 08-568-SLR
)	
AU Optronics Corporation, AU)	
Optronics Corporation America, Chi)	
Mei Optoelectronics Corporation, and)	
Chi Mei Optoelectronics USA Inc.,)	
et al.,)	
)	
Defendants.)	

MEMORANDUM ORDER

At Wilmington this 15th day of November, 2011, having reviewed AUO's *Daubert* motion to exclude opinions by Apeldyn's technical expert Dr. Allen R. Kmetz ("Kmetz") and the papers filed in connection therewith;

IT IS ORDERED that said motion (D.I. 534) is denied, as follows:

1. **Background.** AUO moves the court to exclude any testimony from Kmetz regarding testing of Liquid Crystal Display ("LCD") panels or regarding AUO's sales activities. (D.I. 534; D.I. 535 at 1) Kmetz performed experiments to determine the polarization characteristics of the accused products for purposes of establishing infringement of U.S. Patent No. 5,347,382 ("the '382 patent"), which is directed to the response time of liquid crystal material in VA mode LCD modules. Kmetz tested three multi-domain vertical alignment ("MVA") panels and one TN panel, specifically: (1) 32" AUO MVA T315HW04 V.4 module; (2) 32" CMO MVA V315B6 - L01 Rev. C5 panel; (2) 26" AUO MVA T260XW04 V.7 panel; and a (4) 18.5" Chunghwa TN module

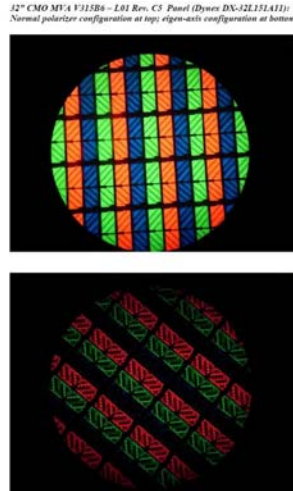
CLAA185WA 03 panel. (D.I. 529-1, ex. 8) Kmetz removed the panels from LCD TVs, cut away a portion of polarizer film, noted the transmission directions, and positioned the sample panels on a workbench under a polarizing microscope. (D.I. 509, ex. 1 at ¶¶ 91-92)¹ Kmetz then set the polarizer and analyzer of the microscope to emulate the orientations of the polarizers that had been removed from the panel (i.e. a “normal polarizer configuration”). (*Id.* at ¶¶ 93-94) Thereupon Kmetz verified that, when a white image was displayed on the panel, the red, green and blue pixels of the panel were bright. (*Id.*) He next rotated the polarizer and analyzer 45 degrees with respect to the panel, or what Kmetz called the “eigen-axis testing configuration,” since the polarizer directions would align with any eigen-axes in this configuration if present. (*Id.* at ¶ 95) That is, “[u]nder ideal conditions, there should be no light transmission through the microscope in this configuration, regardless of whether a white or black image is shown on the panel;” light that is linearly polarized along one eigen-axis “would be blocked by the perpendicular polarizer because there would be no change in its linear polarization.” (*Id.*)

2. Kmetz took photos² (in the bright state) of the panels when a black image was displayed and when a white image was displayed. When a black image was displayed, there was no light transmission regardless of which polarizer configuration was present.

¹Paragraphs 112-129 of Kmetz’s infringement report with respect to AUO (D.I. 529-1, ex. 7) are identical to paragraphs 86-103 of Kmetz’s infringement report with respect to CMO (D.I. 509, ex. 1). The court cites the CMO report in this section in coordinating with its discussion of the merits of CMO’s infringement motion, *infra*.

²The photographs are exhibit 8 to Kmetz’s report and are docketed at D.I. 529-1, ex. 8.

(*Id.* at ¶ 97) When a white image was displayed, the subpixels appeared bright in the normal polarizer configuration. (*Id.* at ¶ 98) In the eigen-axis configuration, a region inside the domains remained dark even when the panel was in the bright state. (*Id.*) The dark regions could “be seen most clearly in the 32" AUO T315HW04 module and the 32" CMO V315B6 module,” and evidenced the presence of an eigen-axis “because light that is linearly polarized remains linearly polarized along that eigen-axis as it passes through the subpixel.” (*Id.*) Kmetz’s photograph of the CMO panel results is reproduced below.



(D.I. 509, ex. 3 at exhibit 8)

3. Kmetz’s sole bases for concluding that AUO’s and CMO’s accused products have eigen-axes (as required by the ‘382 patent) are his comparative photographs contrasting the normal polarizer configuration (above) with the eigen-axis configuration (below). (*Id.* at ¶¶ 97-103) When present, eigen-axes are expected to produce dark regions, as “light that is linearly polarized remains [so] along that eigen-axis as it passes

through the subpixel.” (*Id.* at ¶¶ 95, 98) As the foregoing illustrates, however, light is visible to the naked eye for each of the accused panels tested in the eigen-axis configuration. Kmetz justified this visible light as leakage caused by “fringe effects,” which are not unexpected “because no LCD panel is ideal, and electric ‘fringe fields’ tend to rotate the liquid crystal molecules nearest the boundaries or electrodes slightly out of the eigen-axis plane.” (*Id.* at ¶ 99) Kmetz provided no further elaboration on these “fringe effects,” and concluded that “the AUO and CMO MVA panels still exhibited eigen-axes, despite these fringe field effects.” (*Id.*)

4. AUO also takes issue with Kmetz’s discussion of AUO’s sales of its accused products in his infringement and invalidity reports. Kmetz opines first on the benefit of the ‘382 patent’s “impluse switching,” or overdrive, which improves the response times (and, therefore, the sharpness) of images on LCD panels. (D.I. 529-1, ex. 7 at ¶¶ 53-54³) Kmetz states that it is his understanding that AUO supplies its customers with LCD televisions with improved response times, and elicits feedback from customers about response times, a competitive market feature. (*Id.* at ¶¶ 55-56) Kmetz discusses AUO’s corporate structure and how AUO obtains market information from U.S. retailers, industry publications, customers and other sources. (*Id.* at ¶¶ 60-69) AUO regulates pricing for its products by conducting meetings with retailers and customers in which it gathers price information, and offering incentives for purchasing its products. (*Id.* at ¶¶ 66-75) AUO offers customer support and repair services for its LCD products, has entered into distribution agreements with U.S. companies, and has acted as an original

³Kmetz repeats this information in his expert report on invalidity. (D.I. 529-1, ex. 12 at ¶¶ 201-29)

equipment manufacturer (“OEM”) furnishing LCD products for major brands. (*Id.* at ¶¶ 76-83) In support of the foregoing, Kmetz provides citations to deposition testimony.

5. **Standard.** Rule 702 of the Federal Rules of Civil Procedure allows a qualified witness to testify in the form of an opinion if the witness’ “scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue” and if his/her testimony is the product of reliable principles and methods which have been reliably applied to the facts of the case.

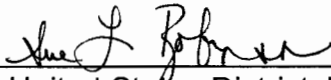
6. **Discussion.** AUO argues that Kmetz’s observations of two accused products do not provide sufficient data to reach a scientific conclusion of whether the accused products have eigen-axes (under Apeldyn’s construction of the term) and, therefore, Kmetz’s opinions should be excluded. (D.I. 535 at 2-6) That is, in order to establish that light in the accused products remains linearly polarized “independent of applied voltage,” it would be necessary to test their properties at multiple voltages in order to establish that it did not change. (*Id.* at 3-4) According to AUO, a “single data point [] is inadequate, both as a matter of law and as a matter of basic science, to establish that any property of the accused products is independent of applied voltage[.]” (*Id.* at 4)

7. The court declines to exclude Kmetz’s testimony in this regard. In the first instance, the court did not embrace Apeldyn’s claim construction. Therefore, the question of whether the light in the accused products remains linearly polarized “independent of the applied voltage” was not one addressed by the court (as it was not addressed in the ‘382 patent) and remains an issue of fact to be tried. Moreover, the only evidence offered by AUO to counter Kmetz’s testing was a statement made in

deposition by defendants' expert, Dr. Pochi Yeh ("Yeh"), that "a **probably** more scientific way to measure [other than photographs] is [] to measure actual transmission." (*Id.* at 5) (citing D.I. 574-2, ex. E at 210:17-211:16) Such measurements were not taken by Yeh; his suggestion is an insufficient basis to preclude Kmetz's testimony on eigen-axes.

8. AUO also argues that Kmetz is "not qualified to offer opinion testimony regarding AUO's sales activities and whether these activities encourage infringement in the United States." (D.I. 535 at 6) Moreover, AUO argues that, since Kmetz relies on the testimony of others, his testimony in this regard would be inadmissible hearsay. (*Id.* at 6-7) Apeldyn responds by contending that Kmetz is not being offered as a "sales and marketing" expert and, further, testimony regarding AUO's commercial success is relevant to secondary considerations of nonobviousness. (D.I. 573 at 17) AUO's activities also provide relevant background showing that AUO has sold and marketed the accused products in the United States for the purpose of proving infringement. (*Id.* at 17-18)

9. Kmetz has been offered as a technical expert, whose opinions relate to infringement and validity. An expert may rely on the testimony of others, to the extent it is reliable, in forming his opinions. Therefore, to the extent that AUO's marketing and sales activities relate to the opinions Kmetz has offered regarding secondary considerations of nonobviousness, Kmetz may testify consistent with his report.


United States District Judge